ABSTRACT OF THE DISCLOSURE

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A data multiplexing apparatus including a packet number obtainment unit for obtaining the total number of packets included in one block of a private data packet stream inputted into a channel buffer and an address obtainment unit for obtaining the address of the starting packet in each private data block. The apparatus also includes a null packet detection unit for detecting null packets when a multiplexed packet stream of data other than the private data is outputted from the channel buffer, and includes a packet replacement unit for replacing the multiplexed null packets detected by the null packet detection unit with the private data packets and outputting the multiplexed packet stream.